IN THE CLAIMS:

Claims 1-11 (Canceled).

12. (Currently Amended) A method of forming a weld wire for storage on a spool, said method comprising:

(a) extruding said weld wire;

(b) substantially removing memory from said weld wire; [[and,]]

(c) forming a substantially linear cast in said weld wire, said substantially linear cast in the form of an undulating curve generally in a single plane, said substantially linear cast having a generally fixed radius of curvature in the range of about 15-40 inches; and,

(d) winding said wire having a substantially linear cast on said spool, said wire at least partially retaining said substantially linear cast after said weld wire is subsequently unwound from said spool.

13. (Original) The method as defined in claim 12, wherein said undulating curve has a generally fixed radius of curvature.

14. (Original) The method as defined in claim 12, wherein said undulating curve is a succession of generally semi-circular sections.

15. (Currently Amended) The method as defined in claim 13, wherein said ~~radius of curvature is in the range of 15-40 inches~~ undulating curve is a succession of generally semi-circular sections.

16. (Currently Amended) A method of forming a weld wire for storage on a spool, said method comprising:

(a) forming said weld wire; and,

(b) imparting a desired shape memory on said weld wire, said weld wire having said shape memory imparted on said weld wire at least partially prior to said weld wire being wound on said spool, said shape memory substantially lying in a single plane wherein said shape memory is generally a waveform having a maximum amplitude for each half cycle, said half cycle having a radius of curvature of at least about 15 inches.

17. (Original) The method as defined in claim 16, wherein said weld wire is at least partially formed by an extrusion process.

18. (Currently Amended) The method as defined in claim 16, wherein ~~said desired shape memory is at least partially imparted on said weld wire prior to winding said weld wire on said spool, and~~ said desired shape memory is at least partially retained on said weld wire after said weld wire is unwound from said spool.

19. (Original) The method as defined in claim 16, wherein said desired shape memory is at least partially imparted on said weld wire by a casting process.

20. (Original) The method as defined in claim 16, including the step of at least partially removing the shape memory on said weld wire resulting from said forming of said weld wire prior to imparting said desired shape memory on said weld wire.

Claim 21 (Canceled).

22. (Original) The method as defined in claim 16, wherein said desired shape memory is a waveform.

23. (Original) The method as defined in claim 22, wherein said waveform has substantially the same maximum amplitude for each half cycle of a full waveform.

24. (Original) The method as defined in claim 22, wherein each half cycle of said waveform is substantially semi-circular.

25. (Original) The method as defined in claim 16, wherein said desired shape memory is at least partially retained on said weld wire as said weld wire passes through a welding tip of a welding machine.

26. (Currently Amended) A method of forming a weld wire for storage on a spool, said method comprising:

(a) forming said weld wire; and,

(b) at least partially imparting a desired shape memory on said weld wire prior to said weld wire being wound on said spool, said desired shaped including a substantially linear cast in the form of a waveform generally in a single plane along a longitudinal length of said weld wire, said cast having a generally fixed radius of curvature of at least about 5 inches, said shape memory at least partially retained on said weld wire after said weld wire is unwound from said spool.

Claim 27 (Canceled).

28. (Previously Presented) The method as defined in claim 26, wherein said waveform is a succession of generally semicircular sections.

29. (Previously Presented) The method as defined in claim 26, wherein said waveform having a half cycle of up to about 60 inches.

30. (Currently Amended) The method as defined in claim [[27]] 26, wherein said waveform having a maximum amplitude for each half cycle of up to about 40 inches.

31. (Previously Presented) The method as defined in claim 26, wherein said waveform having a maximum amplitude for each half cycle, said maximum amplitude of each half cycle having a deviation of less than about 6 inches within one cycle of said weld wire.

32. (New) The method as defined in claim 31, wherein said deviation of said maximum amplitude of each half cycle within one cycle is less than about 4 inches.

33. (New) The method as defined in claim 26, wherein said waveform including half cycles having substantially the same maximum amplitude for each half cycle.

34. (New) The method as defined in claim 27, wherein said waveform having a half cycle of up to about 60 inches.

35. (New) The method as defined in claim 34, wherein said waveform having a maximum amplitude for each half cycle of up to about 40 inches.

36. (New) The method as defined in claim 35, wherein said waveform having a maximum amplitude for each half cycle, said maximum amplitude of each half cycle having a deviation of less than about 6 inches within one cycle of said weld wire.

37. (New) The method as defined in claim 36, wherein said deviation of said maximum amplitude of each half cycle within one cycle is less than about 4 inches.

38. (New) The method as defined in claim 37, wherein said waveform including half cycles having substantially the same maximum amplitude for each half cycle.